

REMARKS

In the Office action dated November 4, 2003, the Examiner objected to an informality in the Specification and considered and rejected claims 1-17 and 30-35. Claims 1-7 and 12-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,573,595 issued to Dible ("Dible"). Claims 1-7, 12-16 and 30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,654,679 issued to Mavretic et al. ("Mavretic"). Claims 32 and 35 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,815,047 issued to Sorensen et al. ("Sorensen"). Claims 8-11, 17 and 32-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sorensen.

Applicants hereby cancel claims 10, 30-31 and 34 and amend claims 1, 32-33 and 35 without prejudice. Support for the amendments to claims 1, 32-33 and 35 can be found at least at pages 8-9, 14 and 25-27 of Applicants' specification.

In view of the amendments and following remarks, Applicants respectfully request reconsideration and withdrawal of all grounds of objection and rejection.

1. Objection to Specification

The Examiner states that an informality exists in the Specification in the section labeled "Brief Description of the Drawings." The present Amendment corrects a typographical error in page 10, lines 12-13. No new matter is entered by the correction.

2. Rejection of Claims 1-7 and 12-16 under 35 U.S.C. § 102(b)

Claims 1-7 and 12-16 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Dible. For a claim to be anticipated under 35 U.S.C. § 102(b), the reference must disclose each and every limitation in the claim. Applicants respectfully submit that Dible does not

disclose every claim element of the claimed invention as presently amended. Specifically, Dible does not disclose, at least, a variable impedance component providing an electrically controllable variable capacitance.

Applicants' claimed invention includes an RF plasma generator that includes a matching network. As recited in representative amended claim 1, Applicants' invention includes a variable impedance component providing an electrically controllable variable capacitance.

Briefly, Dible describes a device for generating plasma for use in semiconductor fabrication. Dible does not disclose a variable impedance component providing an electrically controllable variable capacitance. Accordingly, Applicants respectfully submit Dible fails to anticipate the present invention under 35 U.S.C. § 102(b). Applicants thus respectfully submit that claim 1 is in condition for allowance. Claims 2-7 and 12-16 depend, either directly or indirectly, from amended claim 1. For the above-mentioned reasons regarding claim 1, Applicants submit that these claims also are in condition for allowance.

3. Rejection of Claims 1-7, 12-16 and 30 under 35 U.S.C. § 102(b)

Claims 1-7, 12-16 and 30 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Mavretic. For a claim to be anticipated under 35 U.S.C. § 102(b), the reference must disclose each and every limitation in the claim. Applicants respectfully submit that Mavretic does not disclose every claim element of the claimed invention as presently amended. Specifically, Mavretic does not disclose, at least, a variable impedance component providing an electrically controllable variable capacitance.

Applicants' claimed invention includes an RF plasma generator that includes a matching network. As recited in representative amended claim 1, Applicants' invention includes a variable impedance component providing an electrically controllable variable capacitance.

Briefly, Mavretic describes an impedance matching network. Mavretic describes "an electrical switching means such as PIN diodes to turn fixed capacitors on or off." See Abstract. Mavretic does not disclose a variable impedance component providing an electrically controllable variable capacitance. Accordingly, Applicants respectfully submit Mavretic fails to anticipate the present invention under 35 U.S.C. § 102(b). Applicants thus respectfully submit that claim 1 is in condition for allowance. Applicants have cancelled, without prejudice, claim 30. Claims 2-7 and 12-16 depend, either directly or indirectly, from amended claim 1. For the above-mentioned reasons regarding claim 1, Applicants submit claims 2-7 and 12-16 also are in condition for allowance.

4. Rejection of Claims 32 and 35 under 35 U.S.C. § 102(b)

Claims 32 and 35 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Sorensen. For a claim to be anticipated under 35 U.S.C. § 102(b), the reference must disclose each and every limitation in the claim. Applicants respectfully submit that Sorensen does not disclose every claim element of the claimed invention as presently amended. Specifically, Sorensen does not disclose, at least, a solid state device that electrically controls a change of a capacitance of a component in a matching network.

Applicants' claimed invention includes an RF plasma generator that includes a matching network. As recited in representative amended claims 32 and 35, Applicants' invention includes

a solid state device that electrically controls a change of a capacitance of a component in a matching network.

Briefly, Sorensen describes an impedance matching network in which capacitance is changed “by commanding a D.C. motor 44 to rotate the control shaft of the load vacuum variable capacitor 24.” See Sorensen, Col. 4, lines 13-14. Sorensen does not disclose a solid state device that electrically controls a change of a capacitance of a component in a matching network. Accordingly, Applicants respectfully submit Sorensen fails to anticipate the present invention under 35 U.S.C. § 102(b). Applicants thus respectfully submit that claims 32 and 35 are in condition for allowance.

5. Rejection of Claims 8-11, 17 and 32-34 under 35 U.S.C. § 103(a)

Claims 8-11, 17 and 32-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Sorensen. For the rejection under 35 U.S.C. § 103(a) to be proper, the reference alone or in combination with another reference must teach or suggest all of the claim limitations. Applicants respectfully submit that Sorensen does not teach or suggest every claim element of the invention.

Specifically, as described above with respect to claim 1, Sorensen does not teach or suggest, at least, a variable impedance component providing an electrically controllable variable capacitance. Applicants respectfully submit that Sorensen does not teach or suggest every claim element of the amended claimed invention. Applicants thus submit that claim 1 is in condition for allowance. Claims 8-11 and 17 depend directly from amended claim 1. For the above-mentioned reasons regarding claim 1, Applicants submit these claims also are in condition for allowance.

Further, as described above with respect to claim 32, Sorensen does not teach or suggest, at least, a solid state device that electrically controls a change of a capacitance of a component in a matching network. Applicants respectfully submit that Sorensen does not teach or suggest every claim element of the amended claimed invention. Applicants thus submit that claim 32 is in condition for allowance.

Further, regarding claim 33, Sorensen does not teach or suggest, at least, an electrically controllable variable capacitance capacitor. Applicants respectfully submit that Sorensen does not teach or suggest every claim element of the amended claimed invention. Applicants thus submit that claim 33 is in condition for allowance.

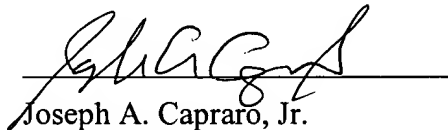
CONCLUSION

In view of all of the foregoing reasons, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection and objection, and allowance of claims 1-9, 11-17, 32-33 and 35.

Respectfully submitted,

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